

What is claimed is:

1. An apparatus for use in providing user inputs to a communication or computing device, characterized by:

5        an input button (14) lying in or on a surface of the communication or computing device and having a receptacle (14a) for receiving a distal end (12) of an indicator instrument (11), for moving or deforming in response to a force exerted on the input button (14) using the indicator instrument (11); and

10        means (14b-c) for detecting the force exerted on the input button (14) based on the moving or deforming of the input button (14) in response to the force, and for providing a signal corresponding to the force.

15        2. An apparatus as in claim 1, wherein the means (14b-c) for detecting the force exerted on the input button (14) comprises a strain sensor.

20        3. An apparatus as in claim 1, wherein the means (14b-c) for detecting the force exerted on the input button (14) comprises a sensor that transmits a signal corresponding to the force at least in respect to the direction of the force.

4. An apparatus as in claim 1, wherein the means (14b-c) for detecting the force exerted on the input button (14) comprises a sensor that transmits a signal corresponding to the force at least in respect to the magnitude of the force.

25        5. An apparatus as in claim 1, wherein the means (14b-c) for detecting the force exerted on the input button (14) comprises a sensor that transmits a signal until the force is removed.

6. An apparatus as in claim 1, wherein the input button (14)

moves or deforms so as to communicate to the means (14b-c) for detecting the force exerted on the input button (14) a signal corresponding to a user action selected from the set consisting of clicking, scrolling, selecting, pointing, cursor positioning, key pressing or typing, and joystick manipulating.

7. An apparatus as in claim 1, wherein the input button (14) moves or deforms so as to communicate a force lying along the surface of the communication or computing device.

8. An apparatus as in claim 1, wherein the input button (14) moves or deforms so as to communicate a force directed orthogonally to the surface of the communication or computing device.

9. An apparatus as in claim 1, wherein the input button (14) moves or deforms so as to communicate a force couple tending to cause a change in pitch of the input button (14) relative to the surface of the communication or computing device.

10. An apparatus as in claim 1, wherein the input button (14) and means (14b-c) for detecting the force exerted on the input button (14) are in combination provided as a box-in-box construction including an outer box (51) and an inner box (52), the inner box (52) having a receptacle (14a) formed so as to allow inserting into it a distal end (12) of the indicator instrument (11), and the outer box having sensing means (14b-c) responsive to forces applied to the inner box via the distal end (12) of the indicator instrument (11), for providing a corresponding signal indicating a user input.

11. A method for acquiring user inputs to a communication or computing device, characterized by:

having a receptacle of an input button (14) lying in or on a surface of the communication or computing device receive a distal end of an indicator instrument (11); and

5 having the input button (14) move or deform in response to a force or a force couple exerted on the input button (14) via the distal end of the indicator instrument (11).

12. The method of claim 11, wherein the moving or deforming of the input button (14) is a sliding motion.

10 13. The method of claim 11, wherein the moving or deforming of the input button (14) is a rocking motion.

14. The method of claim 11, wherein the moving or deforming of the input button (14) is a motion into or out of the surface of the communication or computing device.

15 15. The method of claim 11, wherein the moving or deforming of the input button (14) is a motion substantially in the plane of the surface of the communication or computing device.

16. The method of claim 11, wherein the indicator instrument (11) is used to provide user inputs that would otherwise be provided using a keyboard.